WHAT IS CLAIMED IS:

1. A hybrid vehicle control apparatus for a vehicle having front and rear wheels with at least one of the front and rear wheels being an engine driven wheel driven by an internal combustion engine and at least one of the front and rear wheels being a non-engine driven wheel driven by an electric motor that is mechanically independent from the engine, said hybrid vehicle control apparatus comprising:

a target motor torque setting section configured to set a target drive torque of the electric motor;

a motor output limit determining section configured to determine if said target drive torque of the electric motor reaches an output limit of the electric motor under current operating conditions; and

a torque increasing section configured to increase drive torque to the engine driven wheel when it is determined that said target drive torque of the electric motor reaches said output limit of the electric motor.

2. The hybrid vehicle control apparatus as recited in claim 1, further comprising

a slippage degree detecting section configured to detect a degree of slippage of the engine driven wheel with respect to a road surface; and

a torque increase suppressing section configured to suppress increase of drive torque by said torque increasing section when said degree of slippage detected by said slippage degree detecting section exceeds a predetermined allowable limit.

3. The hybrid vehicle control apparatus as recited in claim 2, wherein

said slippage degree detecting section is configured to detect said slippage degree based on the rotational speed difference between the engine driven wheel and the non-engine driven wheel.

4. The hybrid vehicle control apparatus as recited in claim 3, wherein

said torque increasing section is configured to increase drive torque to the engine driven wheel by an amount equivalent to an amount by which the output limit of the electric motor is insufficient with respect to the target drive torque of the electric motor.

5. The hybrid vehicle control apparatus as recited in claim 4, further comprising

a total drive torque reducing section configured to reduce a driver-intent-based total drive torque when total drive torque is being obtained by both the engine driven wheel and the non-engine driven wheel.

6. The hybrid vehicle control apparatus as recited in claim 1, wherein

said torque increasing section is configured to increase drive torque to the engine driven wheel by an amount equivalent to an amount by which said output limit of the electric motor is insufficient with respect to said target drive torque of the electric motor.

7. The hybrid vehicle control apparatus as recited in claim 6, further comprising

a total drive torque reducing section configured to reduce a driver-intent-based total drive torque when total drive torque is being obtained by both the engine driven wheel and the non-engine driven wheel.

8. A vehicle drive transmission system comprising:

an internal combustion engine;

an electric motor that is mechanically independent from said engine;

front and rear wheels with at least one of said front and rear wheels being an engine driven wheel driven by said internal combustion engine and at least one of said front and rear wheels being a non-engine driven wheel driven by said electric motor; and

a hybrid vehicle control apparatus including

a target motor torque setting section configured to set a target drive torque of said electric motor;

a motor output limit determining section configured to determine if said target drive torque of said electric motor reaches an output limit of said electric motor under current operating conditions; and

a torque increasing section configured to increase drive torque to said engine driven wheel when it is determined that the

target drive torque of the electric motor reaches the output limit of the electric motor.

9. The vehicle drive transmission system as recited in claim 8, wherein an additional electric motor is connected to said engine.

10. The vehicle drive transmission system as recited in claim 8, further comprising

a slippage degree detecting section configured to detect a degree of slippage of said engine driven wheel with respect to a road surface; and

a torque increase suppressing section configured to suppress increase of drive torque by said torque increasing section when said degree of slippage detected by said slippage degree detecting section exceeds a predetermined allowable limit.

11. The vehicle drive transmission system as recited in claim 10, wherein said slippage degree detecting section is configured to detect said slippage degree based on the rotational speed difference between said engine driven wheel and said non-engine driven wheel.

12. The vehicle drive transmission system as recited in claim 11, wherein said torque increasing section is configured to increase drive torque to said engine driven wheel by an amount equivalent to an amount by which said output limit of said electric motor is insufficient with respect to said target drive torque of said electric motor.

13. The vehicle drive transmission system as recited in claim 12, further comprising

a total drive torque reducing section configured to reduce a driver-intent-based total drive torque when total drive torque is being obtained by both said engine driven wheel and said non-engine driven wheel.

14. The vehicle drive transmission system as recited in claim 8, wherein

said torque increasing section is configured to increase drive torque to said engine driven wheel by an amount equivalent to an amount by which said output limit of said electric motor is insufficient with respect to said target drive torque of said electric motor.

15. The vehicle drive transmission system as recited in claim 14, further comprising

a total drive torque reducing section configured to reduce a driver-intent-based total drive torque when total drive torque is being obtained by both said engine driven wheel and said non-engine driven wheel.

16. The vehicle drive transmission system as recited in claim 8, wherein

a pair of said rear wheels are driven by said internal combustion engine and a pair of said front wheels are driven by said electric motor.

17. A hybrid vehicle control apparatus for a vehicle having front and rear wheels with at least one of the front and rear wheels being an engine driven wheel driven by an internal combustion engine and at least one of the front and rear wheels being a non-engine driven wheel driven by an electric motor that is mechanically independent from the engine, said hybrid vehicle control apparatus comprising:

a target motor torque setting means for setting a target drive torque of the electric motor;

a motor output limit determining means for determining determine if said target drive torque of the electric motor reaches an output limit of the electric motor under current operating conditions; and

a torque increasing means for increasing drive torque to the engine driven wheel when it is determined that said target drive torque of the electric motor reaches said output limit of the electric motor.

18. The hybrid vehicle control apparatus as recited in claim 17, further comprising

a slippage degree detecting means for detecting a degree of slippage of the engine driven wheel with respect to a road surface; and

a torque increase suppressing means for suppressing increase of drive torque by said torque increasing means when said degree of slippage detected by said slippage degree detecting means exceeds a predetermined allowable limit.

19. The hybrid vehicle control apparatus as recited in claim 17, further comprising

a total drive torque reducing means for reducing a driver-intent-based total drive torque when total drive torque is being obtained by both the engine driven wheel and the non-engine driven wheel.